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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,291	02/06/2001	Russell J. Apfel	2069.008800/TT3778	8686
23720	7590	09/16/2005	EXAMINER, RYMAN, DANIEL J	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			ART UNIT 2665	PAPER NUMBER

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/778,291

Applicant(s)

APFEL, RUSSELL J.

Examiner

Daniel J. Ryman

Art Unit

2665

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 29 August 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-25.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

Continuation of 11. does NOT place the application in condition for allowance because: Applicant first asserts that Shenoï fails to disclose "monitoring a signal and performing a gain/bandwidth control process based upon monitoring the signal." Examiner, respectfully, disagrees. Shenoï explicitly discloses that the invention "provide[s] a ... gain adjustment as a function of a[n] ... attenuation of a ... communication" (col. 3, lines 4-16) where the attenuation is a function of the frequency of the signal and the distance traveled along the cable (col. 2, lines 35-42 and col. 8, lines 3-24). Here, it is implicit, or at the very least obvious, that the gain is not statically set, but rather is varied as a function of the attenuation of the medium. Therefore, in order to apply the proper gain, Shenoï's system must monitor the signal and then apply a gain/bandwidth control process based on the monitoring.

Applicant goes on to assert that Shapiro does not disclose adjusting the gain as a function of the bandwidth. Examiner, respectfully, disagrees. Shapiro teaches testing a channel in order to determine the gain and bandwidth that each channel is capable of carrying (col. 6, lines 46-61). In Shapiro it is implicit, or at the very least obvious, that the gain and bandwidth of a channel are functions of one another. Therefore, varying the bandwidth requires adjusting the gain and vice versa. As such, Shapiro discloses that the gain is adjusted as a function of bandwidth.

Applicant further asserts that the combination of Shenoï and Shapiro is improper because the combination would not have been obvious without impermissible use of hindsight. Again, Examiner, respectfully, disagrees. Shenoï teaches, in an ADSL system, that attenuation of a signal varies according to distance and frequency (col. 2, lines 35-42 and col. 8, lines 3-24) where the lowpass frequency response of the cable limits the bandwidth of the system (col. 2, lines 41-42). In order to correct this attenuation, Shenoï discloses applying different gains to a signal depending on the signal's bandwidth (i.e. frequency range) and the distance the signal has traveled along the cable (col. 8, lines 3-24). Shapiro teaches, in an ADSL system (col. 1, lines 56-57 and col. 5, lines 61-62), applying a particular gain to a particular bandwidth of a signal depending on the SNR of the channel (col. 6, lines 30-61). Therefore, the combination of Shenoï and Shapiro, which are both analogous art directed to solving the same problem, suggests monitoring a signal and applying a particular gain to the signal based on the signal's bandwidth (i.e. frequency) and distance on the cable in order to ensure a proper SNR for the signal.

For the foregoing reasons, Examiner maintains that the claims are obvious in view of the cited prior art.